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Source:
Letter to CSLC Commission

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Washington, D.C. 20593-0001

Cy Oggins
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825-8202

RE: **Comments on Draft Environmental Impact Statement/Environmental Impact Report for the Cabrillo Port Liquefied Natural Gas Deepwater Port (State Clearinghouse No. 2004021107)**

Dear Mr. Kusano and Mr. Oggins:

Thank you for the opportunity to review and comment on the Draft Environmental Impact Statement/Environmental Impact Report ("EIS/EIR") for the Cabrillo Port Deepwater Port Project. BHP Billiton proposes to construct and operate a liquefied natural gas ("LNG") floating storage and regasification unit ("FSRU") in federal waters about 14 miles off the coast of Ventura and Los Angeles counties. The project would include installation and operation of an FSRU and new offshore and onshore natural gas pipelines.

The project requires submittal of a consistency certification to the Coastal Commission pursuant to Section 307(c)(3)(A) of the federal Coastal Zone Management Act. Also, the applicant must obtain a coastal development permit to authorize project-related activities located within State waters. To approve the project, the Coastal Commission must find that the project will be constructed and operated in a manner consistent with the coastal resource protection and use policies of Chapter 3 of the Coastal Act. Onshore project-related components (e.g., pipelines and a metering station) located within the coastal zone will require a separate coastal development permit from the City of Oxnard (and/or County of Ventura) under its certified Local Coastal Program. The local government coastal permit(s) decision may be appealed to the Coastal Commission.

S005-1

Coastal Commission staff has focused its review of the Draft EIS/EIR on certain key issue areas central to the Coastal Commission's evaluation of the proposed project. The document reads well and contains important information necessary for the Coastal Commission to assess this project's conformity with the Coastal Act. Nonetheless, the Draft EIS/EIR misses some critical

S005-1
Thank you for the information. Section 1.6 discusses the "Permits, Approvals and Regulatory Requirements" pertaining to the proposed Project.

information needed for the Coastal Commission's review. As detailed below, we ask that the Final EIS/EIR provide additional and thorough information necessary for the Coastal Commission to evaluate the proposed project's consistency with applicable Coastal Act policies. To that end, we request that the US Coast Guard and MARAD suspend the Deepwater Port Act timeline for a time certain to allow for adequate time to gather and analyze the additional requested information. Our comments and requests for additional information are as follows: **S005-2**

Description of the Proposed Action

1. On Page 2-10 (Lines 36-37), the Draft EIS/EIR states that at each of the testing points gas may be rejected if it does not meet pipeline-quality requirements. What happens to rejected gas? **S005-3**

2. The HDD bore should maintain a constant depth beneath the seafloor and not be horizontal as indicated. The Coastal Commission generally has required a minimum depth of 50 feet for such bores, with greater depths if conditions warrant.

3. A geotechnical report addressing geologic conditions along the proposed HDD bore will be necessary before the Coastal Commission can approve a coastal development permit for the proposed project. It would be helpful if this report were prepared now and incorporated into the EIS/EIR. Such a report should, at a minimum: **S005-4**

    a) Provide any and all geological information that may be useful to the drilling contractor in preventing frac-outs or other inadvertent return of drilling fluids to the sea floor.

    b) Make use of, ideally, at least three geotechnical borings—one at either end of the bore, and at least one in the middle. This may not be practical in an ocean bore such as this, but at least one geotechnical boring, extending significantly below the planned depth of the bore, should be collected and examined.

    c) If necessary, additional work (seismic reflection, seismic refraction, ground penetrating radar, etc.) should be undertaken to further characterize the stratigraphy along the proposed bore.

    d) Provide recommendations on suitable drilling horizons.

    e) Provide recommendations on the possible use of casing at the entry bore.

    f) Provide a geologic cross section based on the above data, showing the proposed bore.

    g) Provide a discussion of special drilling conditions that may be encountered (cobbles, unconsolidated sands, etc.).

    h) Provide a discussion of existing fractures, and make recommendations on how to minimize the risk of inadvertent return of drilling fluids to surface.

4. Under the Subsection 2.4.2 Offshore Pipelines and Associated Facilities (Page 2-37, Lines 8-13), the Draft EIS/EIR states that preparation of the HDD exit hole locations would

S005-2
All deepwater port applications fall under the authority of the Deepwater Port Act, which requires that a decision on the application be made within 330 days of the publication of the Notice of Application in the Federal Register. The Notice of Application for the Cabrillo Port Project was published in the Federal Register on January 27, 2004. Although the comment period (53 days) could not be extended at that time, a Revised Draft EIR was recirculated in March 2006 under the CEQA for an additional public review period of 60 days. Section 1.4.1 contains additional information on this topic.

Section 1.5 contains information on opportunities for public comment. After the MARAD final license hearing, the public will have 45 days to comment on the Final EIS/EIR and the license application. The Federal and State agencies will have an additional 45 days to provide comments to the MARAD Administrator. The Administrator must issue the Record of Decision within 90 days after the final license hearing. The CSLC will hold a hearing to certify the EIR and make the decision whether to grant a lease. The California Coastal Commission will also hold a hearing. Comments received will be evaluated before any final decision is made regarding the proposed Project.

S005-3
Section 2.2.1 describes the process of testing the natural gas quality and what would be done if an LNG shipment were rejected.

S005-4
The installation of shore crossing pipelines has been modified since issuance of the October 2004 Draft EIS/EIR. Horizontal directional drilling (HDD) is no longer being proposed for the shore crossing; the Applicant would use horizontal directional boring (HDB) instead. Sections 2.5 and 2.6, which describe the installation of the FSRU, the offshore pipelines, and the shore crossing, have been updated with additional information. Section 2.6.1 provides a description of HDB and the depth that would be used. Appendix J4 is the geotechnical desktop study of the shore crossing. Appendix D contains additional information on the HDB technology, operations, and monitoring plans.

involve excavating an area and installing a temporary sheet pile fluid containment cofferdam for the drilling mud. It is unclear how a subsea cofferdam would achieve this goal. And wouldn't the 46-foot water depth make the construction of a cofferdam extending to above the sea's surface very difficult? Further, the environmental effects of constructing a temporary cofferdam in the ocean are not evaluated in the Draft EIS/EIR. Nevertheless, we also understand that this element of the project description may be incorrect, that BHP Billiton does not intend to construct a cofferdam for the HDD exit holes proposed in the open ocean. In the Final EIS/EIR please specify if a cofferdam or other fluid containment method is proposed for the exit holes and provide an evaluation of any associated environmental effects. **S005-5**

5. It is unclear how the drilling mud is to be prevented from entering the marine environment when the HDD boring reaches its exit point on the sea floor. On previous projects, the Coastal Commission has required that, when the bit approaches within twenty feet of the ocean floor, the drilling mud in the bore be replaced by seawater for the remainder of the drilling process. **S005-6**

6. An HDD monitoring and spill contingency plan will be required by the Coastal Commission as part of its federal consistency review and evaluation of a coastal development permit application. Elements of such a plan are alluded to in the Draft EIS/EIR, but the plan itself is not included. It would be helpful if such a plan could be prepared and made part of the Final EIS/EIR. Such a plan should contain: **S005-7**

   a) A description of the proposed bore

   b) A training program

   c) A monitoring program to detect possible frac-out or other inadvertent release of drilling fluids to the surface. Such a monitoring program may make use of monitoring of drilling fluid pressures and return volumes, use of dyes to aid detection in marine waters (coupled with a sampling program), or direct inspection by ROV or divers.

   d) An evaluation of the worst-case spill scenario

   e) A list of equipment to be kept on site (or nearby) to address the worst-case spill scenario

   f) A response plan, using a decision tree approach, for various contingencies including loss of drilling fluid returns, detection of dye/and or bentonite in marine waters, up to and including the worst case spill scenario

   g) A call down list for prompt agency notification in the event of a spill

   h) MSDS sheets for all materials

7. It appears that HDD may be used for some stream crossings. A geotechnical report and a monitoring and spill contingency plan, as described above, should be prepared in advance of each such drilling operation. **S005-8**

S005-5
See the response to Comment S005-4.

S005-6
See the response to Comment S005-4.

S005-7
Appendix D1 contains a drilling fluids release monitoring plan for HDB.

S005-8
No HDD for stream crossing is proposed for the coastal zone. The only location where HDD may be used is at the Santa Clara River crossing, as described in Section 2.7.2.1. If HDD were to be used, an HDD monitoring and spill response plan would be prepared, as described in Section 4.8.4 under AM WAT-6b. A geotechnical and geologic evaluation of the proposed pipeline routes is included in Appendix J3.

8. On Page 2-40 (Lines 30-32), the Draft EIS/EIR states that pipe will be laid on the seafloor and then pulled landward through the pre-drilled HDD holes. Please provide more detail on the pipe-pulling phase of the project – how much area of the seafloor will be affected by pipe pulling? See Comment 22 below. **S005-9**

9. How far offshore will the HDD exit point surface? The document is internally inconsistent; for example, Page 4.15-4 (Line 15) states the exit point is 3,000 feet from the shoreline and Page 4.15-14 (Line 13) states 4,500 feet from the shoreline. **S005-10**

Public Safety: Hazards and Risk Analysis

10. Without justifying why, the Draft EIS/EIR applies a vapor dispersion and thermal radiation consequence modeling program (Fire Dynamics Simulator (FDS)) that is different than the methodologies recently approved and used by the Federal Energy Regulatory Commission (FERC) for LNG projects. In the Final EIS/EIR, please explain the differences between the models/methods and the reason why FDS was applied here instead of the model used by FERC. **S005-11**

11. It appears that the two models mentioned above lead to very different conclusions and hazard zones. The FERC approach suggests that a single LNG tank rupture results in a 2.5-mile hazard zone. By contrast, the Draft EIS/EIR concludes that the loss of three LNG tanks results in only a 1.6-mile hazard zone. Please explain this discrepancy in the Final EIS/EIR. In addition, we strongly recommend that the FERC methods also be applied to this project and that the results be included in the Final EIS/EIR and compared with the results of the FDS model. **S005-12** **S005-13**

12. Pages 4.2-18-4.2-19 summarize some of the assumptions used in the computer modeling to guide the analysis. The results of the model are sensitive to assumptions regarding wind speed, air temperature, water temperature, surface roughness, etc. It is unclear to us if "worst case" assumptions were applied in the consequence modeling. Under "wind," for example, the Draft EIS/EIR states that 6 m/s is a "reasonable estimate of winds that might be expected." But is wind speed at 6 m/s a "worst case" assumption? We question whether a worst-case scenario has been applied here and therefore if the hazard zone is underestimated. Please address these concerns in the Final EIS/EIR. **S005-14**

13. *Table 4.2.6 – 1 Lead and Cooperating Agency for the Project (Page 4.2. - 41).* The California Coastal Commission has jurisdiction/roles over those portions of the project in federal waters as well as in state waters and onshore. Please add the Coastal Commission as a Primary or Cooperating agency to Table 4.2.6 –1, as follows: **S005-15**

S005-9
See response to Comment S005-4. Appendix D4 provides an explanation of the HDB pipeline installation process.

S005-10
Section 2.6.2 describes the HDB process and Figure 2.6-1 is a schematic of the depth of the bore. The HDB exit hole is approximately 4,000 feet offshore.

S005-11
The Project is regulated by the USCG and MARAD under the authority of the Deepwater Port Act. FERC's regulations are prescriptive and standardized to address the general siting of onshore LNG terminals. In contrast, due to various different designs of deepwater ports, the USCG conducts site-specific independent risk and consequence analyses using the most recent guidance and modeling techniques. The guidance used for Cabrillo Port is Sandia National Laboratories' "Guidance on Risk Analysis and Safety Implications of a Large Liquefied Natural Gas (LNG) Spill Over Water." This report recommends a framework for analyses of large LNG spills onto water. It was prepared for the U.S. Department of Energy (DOE), and an external peer review panel evaluated the analyses, conclusions, and recommendations presented.

The lead agencies directed preparation of the current IRA, and the U.S. Department of Energy's Sandia National Laboratories independently reviewed it, as discussed in Section 4.2 and Appendix C.

Section 4.2.7.6 and the IRA (Appendix C1) discuss the models and assumptions used and the verification process. Sandia National Laboratories (Appendix C2) concluded that the models used were appropriate and produced valid results.

S005-12
To date, there has never been a large spill of LNG to water. Conducting a large LNG spill to validate the models would result in adverse environmental consequences. However, models are commonly validated using experimental data. Section 2.3.4.2 of Appendix C1 contains information on tests executed by the U.S. Department of Energy and the calibration/verification of the Fire Dynamics Simulator model used in the Independent Risk Assessment. Appendix C1 provides additional information on this topic, and Appendix C2, prepared by the U.S. Department of Energy's Sandia National Laboratories, contains information on the review and assessment of the models used.

S005-13
See the response to Comment S005-11.

S005-14
The worst credible case scenario modeled in the Independent Risk Assessment (IRA - Appendix C1) involved an intentional event resulting in the release of 53 million gallons (200,000 m^3) of LNG to the ocean surface. Section 4.2.7.2 describes the likely potential consequences of such a scenario. The IRA includes revised scenarios and describes how wind speed and ocean and weather conditions were used in the modeling.

S005-15
Table 4.2-3 has been revised and lists the California Coastal Commission (CCC) as a lead agency for the siting of the offshore pipelines within State waters, the shore crossing, and the metering station. The table lists the CCC as a cooperating agency for the design and safety regulations of the FSRU, the offshore pipelines in Federal and State waters, and the shore crossing; and for safety inspections and enforcement actions of offshore pipelines and the shore crossing.

Facility and Purpose	Location	Siting	Design and safety	Safety inspection	Enforcement action
1.Floating structure 2.Submarine Pipelines	Offshore - Federal waters	**CCC – primary due to federal consistency review for 1 and 2**	CCC - primary due to federal consistency review for 1 and 2	*CCC- cooperating for 1 and 2*	*CCC – cooperating for 1 and 2*
4.Submarine Pipelines 5.Sub-tidal to onshore crossing 6. Metering Station and Odorization facility 7.Onshore pipelines and facilities	State Waters Ormond Beach Reliant Energy, Ormond Beach Ventura County	**CCC – primary due to state permit authority for 4,5,6,7**	*CCC – cooperating for 4,5,6,7*	*CCC – cooperating for 4,5,6,7*	*CCC – cooperating for 4,5,6,7*

Key: Bold = Primary Implementing Agency
Italics = Key Cooperating Agency

14. Under the Table 4.2.6-2 **State** [Laws] heading, please reference the Coastal Commission and the language of Coastal Act Section 30232 by copying the Coastal Act citation from Table 4.12-2 Major Laws … for Hazardous Materials (Page 4.12-6). Also, under the Table 4.2.6-2 **Federal** [Laws] heading, please add a citation for Coastal Zone Management Act Section 307(c)(3)(A) and the language of Coastal Act Section 30232. **S005-16** **S005-17**

15. The Draft EIS/EIR states that the FSRU will be operated in accordance with the following emergency response plans, operations/safety plans and spill prevention and control measure plans, but they are not listed as explicit Mitigation Measures in Table 4.2.8-1. Please add preparation and implementation of the following plans to the list of Mitigation Measures. **S005-18**

- *Deepwater Port Operations Manual* prepared in accordance with 33 CFR 150.15 and the International Safety Management code.
- *Conduct Periodic Emergency Drills and Exercises and prepare Emergency Procedures Annex* to the Operations Manual in accordance with 33 CFR 150.15(p). This annex will specifically address contingency response procedures to all emergency incidents, including fire, reportable product spill, personal injury, or terrorist incident.
- *Deep Water Port Security Plan* prepared in accordance with 33 CFR 150.15(v).

S005-16
Table 4.2-6 has been revised in response to the comment.

S005-17
Table 4.2.6 has been revised and lists the California Coastal Commission as the regulatory agency for the Federal Coastal Zone Management Act.

S005-18
The cited plans are listed under Impact PS-1 in Section 4.2.7.6 and in Appendix C3-2. The cited plans are not listed as explicit mitigation in Table 4.2.8-1 because they are legal requirements, as discussed in Section 4.1.1.

- *Spill Control and Countermeasure Plan (SPCC)* prepared in accordance with 40 CCR Part 112 (this is listed in EIS/EIR Section 4.12 as applicant mitigation measure *AMM-HAZ-2a* and in Section 4.7 as mitigation measure *MM BioMar – 5a,* but the emergency response and prevention measures contained in the SPCC plan are also applicable to public safety.)

Marine Traffic

16. Although the proposed location of the FSRU is outside the coverage area for the LA/LB VTS, is it feasible for the LNG carriers transiting to the FSRU to report in by AIS to the LB/LA VTS? If so, we recommend this be included in the Final EIS/EIR as a mitigation measure. **S005-19**

Biological Resources – Marine

Regulatory Setting

17. The discussion on Page 4.7-27 (Lines 35-37) of federal consistency jurisdiction under the Coastal Zone Management Act misses that a license approved by the US Coast Guard and MARAD under the Deepwater Port Act triggers federal consistency review (in addition to a permit required by the EPA and U.S. Army Corps of Engineers). **S005-20**

18. On Page 4.7-28 (Line 14-16) the Draft EIS/EIR states that the presence of the pipeline would provide new low-relief habitat that would act as substrate for algae and benthic invertebrates. While we agree that algae and benthic invertebrates will colonize any hard object placed in the ocean, we request that the EIS/EIR not refer to the natural gas pipeline as "habitat." Notwithstanding the fact that marine wildlife and plants will live and grow on hard surfaces placed in the ocean, the Coastal Commission does not consider oil and gas infrastructure that has been placed in the ocean expressly for oil and/or gas purposes to be biological "habitat." Consequently, the Coastal Commission has not required mitigation if marine resources that grow or reside on the subsea infrastructure are damaged or destroyed upon removal (e.g. kelp growing in an oil pipeline). **S005-21**

19. Under the **Federal** laws section of Table 4.7-7 (Page 4.7-29), please amend the reference to the Coastal Zone Management Act to read: Coastal Zone Management Act 307(c)(3)(A) ~~NOAA~~, California Coastal Commission. Also, please add the language of Coastal Act Section 30232 to the **State** laws section of this table. **S005-22** **S005-23**

20. Table 4.7-8 lists implementation of AMM HAZ-5a as mitigation for Impact BioMar-6. However, the SPCC plan referenced in AMM HAZ-5a, as described in Section 4.12 of the Draft EIS/EIR, applies to onshore construction activities, not impacts at the FSRU. However, implementation of MM BioMar-5a or AMM HAZ-2a would apply to the FSRU. Please correct this in the Final EIS/EIR. **S005-24**

S005-19
As cited in Section 4.3.2, 33 CFR § 164.46 requires that all vessels, in commercial service, 65 feet (20 m) or greater in length or greater than 300 GT are required to be equipped with AIS; therefore, LNG carriers would be required to have AIS. The LB/LA VTS will be able to identify the AIS of LNG carriers within 25 NM of the Point Fermin lighthouse.

S005-20
The text has been revised. See Table 4.7-7.

S005-21
Table 4.7-7 contains updated information on the Coastal Zone Management Act.

S005-22
Table 4.7-7 has been revised in response to the comment.

S005-23
Table 4.7-7 has been revised in response to the comment.

S005-24
Impact BioMar-7 in Section 4.7.4 has been revised in response to this comment.

21. The spill plans referenced in MM BioMar-5a and AMM HAZ-2a appear to be the same. If so, only one mitigation measure is needed. **S005-25**

Offshore Pipe-Pulling

22. Please evaluate in the Biological Resources – Marine section of the Final EIS/EIR the environmental effects of seafloor pipe pulling. **S005-26**

Ballast Water Exchanges

23. On Page 4.7-38 (Lines 18-19), the Draft EIS/EIR states that the FSRU would require continual use of seawater for ballast, and that this use is expected to cause 100% mortality to marine organisms in that water. It states that the use of seawater is not expected to cause significant impacts to ichthyoplankton or EFH. The adverse environmental effects associated with this type of seawater use will vary depending on site characteristics (e.g., location, depth, interaction with currents, etc.) and the makeup of the community of marine organisms in the area. The Draft EIS/EIR states that the FSRU would use from 15,000 to 20,000 metric tons of seawater per day (equivalent to about 4 to 5 million gallons per day). However, it later states that the net amount of seawater used for ballast would be from about 50,000 to 55,000 metric tons per day (about 13 to 14 million gallons per day). It appears these latter figures may apply to the ballast to be used by the LNG carriers. Please clarify the amount of seawater to be used by the FSRU and by the LNG carriers. **S005-27** **S005-28**

24. Please characterize the species and densities of marine organisms in the area of the proposed project that could be entrained or impinged during the ballast water exchanges. This characterization should include diurnal and seasonal variations in the specific makeup of the locally affected biological community. **S005-29**

25. Please describe the anticipated temperature difference between the discharged ballast water and the surrounding seawater and what effects this difference is likely to have on the nearby biological community. **S005-30**

26. Please describe the effects of the biomass (i.e., dead plankton, other marine organisms) that would be discharged with the ballast water. **S005-31**

27. The Draft EIS/EIR states that entrainment will be minimized through use of two screens - an outer screen with a 0.5-inch mesh and an inner screen with a 0.25-inch mesh. This approach will still result in entrainment of smaller organisms and will likely cause impingement of larger organisms. Limiting intake flows to less than 0.5 feet per second may reduce impingement. Please describe the biological basis for this design and these screen sizes. Please also describe the anticipated intake velocity in the area of the outer screen. Additionally, please describe what measures would be used to clear the screens and prevent bio-fouling. **S005-32**

S005-25
The impact and its analysis has been revised. See Section 4.7.4 under Impact BioMar-7.

S005-26
The pipeline installation technique has been revised from the use of HDD to HDB. See Section 2.6 for a description of offshore and shore crossing pipeline installation. Section 4.7.4 under Impact BioMar-2 discusses the impacts on marine biological resources during offshore construction using HDB.

S005-27
The Project has been modified since issuance of the October 2004 Draft EIS/EIR. See Section 1.4.2 for a summary of Project changes.

Section 4.7.4 contains information on uptake volumes and potential impacts of seawater uptake and discharge on marine biota, including ichthyoplankton from intake of seawater, including ballast, from thermal discharges of cooling water. The ichthyoplankton impact analysis (Appendix H1) includes both literature results and data from California Cooperative Oceanic Fisheries Investigations (CalCOFI) surveys. CalCOFI surveys have been consistently collected over a period of time and are the best scientific data currently available.

S005-28
See the response to Comment S005-27.

S005-29
Appendix H1, Section 4.7.1.3, and Section 4.7.4 under Impact BioMar-3 discuss this topic.

S005-30
"Cooling Water Discharges" in Section 4.7.4 under Impact BioMar-3 discusses this topic.

S005-31
Section 4.7.4 under Impact BioMar-3 discusses this topic.

S005-32
Section 4.7.4 under Impact BioMar-3 discusses this topic.

28. The Draft EIS/EIR states that ballast pumps would be located about 43 feet below the water line. Please describe the basis for placing pumps at this depth. Will this depth result in the lowest entrainment rate? Please also evaluate other depths that would be feasible and could result in fewer adverse environmental impacts. This should include an evaluation of whether it is feasible to install a subsurface intake - one that extends into the sandy substrate on the ocean floor below the FSRU - to avoid entrainment/impingement impacts. **S005-35**

29. Please evaluate whether ballast water can be re-used. Rather than using new seawater for each ballast exchange, can a large supply of water to be used as ballast water be stored at the facility (for instance, in submerged or semi-submerged tanks)? Can the water generated by the submerged combustion vaporizers (estimated to generate an average of about 199,680 gallons of water per day) be used for ballast instead of seawater? **S005-36**

    With respect to cumulative impacts, please evaluate the issues above as they apply to the FSRU only and to both the FSRU and the LNG carriers.

Biological Resources – Terrestrial

30. Seven tenths of a mile (0.7) of the onshore portion of the project lies within the coastal zone. The narrative description of terrestrial resources found within the coastal zone (Pages 4.8-2 – 4.8-12) is very general, too vague for the Coastal Commission to assess terrestrial impacts, if any, which may occur due to pipeline trenching, HDD, and other activities. It's impossible to determine if pipe-laying activities will affect wetlands. We strongly request therefore that a comprehensive biological survey be conducted now and its results incorporated into the Final EIS/EIR so that it can be known to the decision-makers whether wetlands, environmentally sensitive habitat, and rare and special status plants and wildlife species may be impacted by onshore activities. **S005-37**

31. The Draft EIS/EIR states that a jurisdictional wetland delineation survey has been completed. That survey, however, relied solely on the federal U.S. Army Corps of Engineers definition of wetlands. Within the coastal zone, we need a wetland delineation survey based on the definition of wetland found in the Coastal Act and that used by the California Department of Fish and Game. Please include the results of that wetland delineation survey within the Final EIS/EIR. **S005-38**

32. In Section 4.8.1.1 Coastal Zone (Page 4.8-11), the Draft EIS/EIR states that the federal wetland delineation identified 26 wetland/surface water features. This suggests incorrectly that 26 wetlands were found with the 0.7-mile section of the coastal zone. We assume that 26 wetlands were found along the entire onshore pipeline corridor not just within the coastal zone. **S005-39**

33. Some of the recommended mitigation measures are worded generally, with very few specific requirements like deadlines for compliance. Some examples follow:

S005-35
Appendices D5 and H1 and Section 4.7.4 under Impact BioMar-3 discuss this topic.

S005-36
Appendix D5 and Section 2.2.2.4 discuss this topic. Section 4.20 discusses cumulative impacts within each resource issue area.

S005-37
Subsequent to the completion of the October 2004 Draft EIS/EIR, the Applicant completed surveys of the pipeline rights-of-way in accordance with California Department of Fish and Game protocol. Surveys included a wetland delineation survey that meets the California Coastal Commission and California Department of Fish and Game wetland definition, botanical and wildlife surveys for Federal and State listed species, a wintering waterfowl survey, a burrowing owl survey, and surveys to determine whether any oak trees would need to be removed during construction. Section 4.8 has been updated with the results of these surveys, and Section 4.8.4 contains updated mitigation measures. Additional preconstruction plant and wildlife surveys, specific to the final construction timeline and designated pipeline alignment, would be completed for special status species, federally listed species, or California protected species specified by the USFWS or the CDFG, to minimize the potential for causing mortality of local wildlife. However, for purposes of the impact analyses and resultant mitigation, all relevant species are presumed to exist in the vicinity of the proposed Project.

S005-38
The Applicant has completed a wetland delineation (using Army Corps of Engineers definitions and California Coastal Commission and California Department of Fish and Game wetland definitions where appropriate) identifying wetlands and waters of the United States along the Project pipeline routes and at the proposed metering stations. Section 4.8.4 addresses potential impacts on wetlands. Mitigation measures presented in Section 4.8.4 have been developed to avoid, minimize, or reduce impacts on wetlands and waters of the United States during construction activities. Tables 4.18-5 and 4.18-6 also provide descriptions of the waterbodies, most of which are concrete flood control channels or agricultural drains, along the proposed pipelines and alternatives.

S005-39
The discussion of wetlands in the coastal zone in Section 4.8.1 has been updated.

- AMM-TerrBio-1a proposes in part implementation of a Stormwater Prevention Plan. The EIS/EIR should identify the key specific elements and minimum requirements of an adequate plan. Should an agency review and approve the plan? S005-40
- MM -TerrBio-1b also recommends that a Spill Prevention, Control and Countermeasure Plan "be drafted" to minimize spill impacts. A mitigation measure should require implementation of a plan that has been prepared under specific regulations and standards (e.g., pursuant U.S. EPA 40 CFR Part 112) and approved by the appropriate agency or agencies. Is the SPCC Plan referenced here the same as that referred to in Table 4.12-2, Page 4.12-7, under U.S. EPA 40 CFR Part 112? S005-41

34. We therefore recommend that after the appropriate wetland, botanical and wildlife surveys are completed, that the proposed mitigation measures be reviewed again, and rewritten as necessary to provide greater specificity and enforceability. S005-42

Geologic Resources

35. On Page 4.11-7 (Line 16), replace "faces" with "facies" S005-43

36. On Page 4.11-25 (Lines 6-25), the wording is unclear. Is this what is intended? S005-44

> For the Ports of Los Angeles and Long Beach, the run-up elevation with a 100-year return period is 8.0 feet (meters?) and the run-up elevation with a 500-year return period is 15.0 feet (meters?). For the Port of Hueneme, the run-up elevation with a 100-year return period is 11.0 feet (meters?) and the run-up elevation with a 500-year return period is 21.0 feet (meters?).

37. Page 4.11-31 (MM GEO-1c): This mitigation measure calls for "studies at suspected active fault crossings to accurately define the fault plane location, orientation, and direction of anticipated offset." These studies most likely will have to make use of high-resolution seismic reflection surveys and are critical for the review of the project. Such studies should be completed now and included in the Final EIS/EIR. Review of such studies and their recommendations will be needed as part of the Coastal Commission's federal consistency review and evaluation of a coastal development permit application for this project. S005-45

38. See comment (2) under Description of Proposed Action, above. S005-46

39. See comment (6) under Description of Proposed Action, above. S005-47

40. The Draft EIS/EIR indicates that geotechnical studies will be undertaken in advance of the construction of the mooring system. Similar to our Comment # 37, such studies are critical for the Coastal Commission's review of the project and should be completed now. The results should be part of the Final EIS/EIR. S005-48

41. Not all of the impacts have been assigned their correct class. For example, Impact Geo-5 (Mass movement, which is of a transitory and sporadic nature, could damage pipelines or structures) appears clearly to be a Class 1 impact, at least where large landslides are S005-49

S005-40
Spill Prevention, Control and Countermeasure plans do not require approval but may be reviewed by the USEPA.

S005-41
Section 4.18.2 discusses the requirements of a Stormwater Pollution Prevention Plan (SWPPP) under the Clean Water Act. As stated in Section 4.18.4, the spill response plan (AM WAT-6b) would be incorporated into the SWPPP as a requirement of the construction storm water NPDES permit and the Spill Prevention, Control, and Countermeasures (SPCC) Plan. This measure would also minimize impacts on wetlands and is cited in Section 4.8.4 under Impact TerrBio-3. The requirements for SPCC plans, both onshore and offshore, are also discussed in Section 4.12.2.

S005-42
See response to Comment S005-37.

NEPA and the CEQA require that an EIS/EIR contain a detailed discussion of possible mitigation measures; however, NEPA does not require that a complete mitigation plan be done at the time of the EIS. In Robertson v. Methow Valley Citizens Council, 490 U.S. 332, 109 S.Ct 1835 (1989), the court determined that "[t]here is a fundamental distinction, however, between a requirement that mitigation be discussed in sufficient detail to ensure that environmental consequences have been fairly evaluated, on the one hand, and a substantive requirement that a complete mitigation plan be actually formulated and adopted, on the other."

Under the CEQA, mitigation measures "may specify performance standards which would mitigate the significant effect of the project and which may be accomplished in more than one specific way." (State CEQA Guidelines section 15126.4(b)).

Mitigation measures throughout the EIS/EIR that require future products, e.g., the Biological Resource Mitigation Implementation and Monitoring Plan, contain a listing of topics that must be addressed. These requirements are "performance standards" by which such plans would be evaluated when practical. NEPA does not require performance measures for proposed mitigation measures but only requires mitigation measures to be identified (40 CFR 1502.14(f) and 1502.16(h)). The various Federal permits (e.g., CWA, Section 404) required for the Project may contain additional conditions as a component of that permit. In those cases, the issuing agency would be responsible for ensuring compliance.

S005-43

The text in Section 4.11.1 has been updated in response to this comment.

S005-44
The text and given units in Section 4.11.1.8 have been updated in response to this comment.

S005-45
This refers to the MM GEO-3c, not -1c, in the October 2004 Draft EIS/EIR. The quoted section is referring to the terrestrial portion of the project, not the offshore portion.

A high-resolution seismic survey could be planned if mandated, depending on permits and when a vessel is available. However, the offshore fault crossings are on the Hueneme fan deposits where previous investigations have produced minimal results. The poor imagery of potentially active faults is due to seabed topography, the depositional nature of the fan deposits, and the very limited definition of the uppermost extents of potentially active strike-slip faults.

The seismic hazards reports by Fugro West (June 2004) and Honegger Consulting (November 2004) demonstrated that the crossing of the two faults by the pipelines is not a design issue, essentially regardless of the precise location of these faults. The pipelines can endure the design estimates of fault slippage as currently designed.

S005-46
See the response to Comment S005-4.

S005-47
See the response to Comment S005-7.

S005-48
Geotechnical studies completed for the marine portion of the project have included two series of piston coring programs along the proposed route and within the proposed anchorage area.

As described in Section 4.11.4 under MM GEO-3c, future marine geophysical and geotechnical studies are planned for the project once the permit has been obtained. These studies are intended to provide engineering parameters for the conditions identified during the initial survey investigation. Engineering data of this type require specific vessels and equipment not currently available on the West Coast. After obtaining the permit, BHP Billliton plans to mobilize the required vessels and equipment to obtain the necessary

engineering data to advance the project. Due to vessel availability and significant mobilization costs, this phase of final site work can be scheduled only after obtaining the permit. See MM GEO-3c for the requirements of the content of the final site investigation report.

S005-49
The primary mitigation measure for large landslide areas is to avoid these areas. Section 4.11.4 contains additional information on this topic.

considered, but is assigned Class 3. Several other geologic impacts are assigned Class 3, when they may more appropriately be classified as Class 2 or even Class 1. We request that significance classifications of the geologic hazards be reconsidered in the Final EIS/EIR.

42. The mitigation measures to reduce the significance of impacts GEO-4 and GEO-5 are vague. Please provide evidence that pipelines can be constructed to withstand direct surface rupture and/or large submarine mass movement. **S005-50**

43. Because of their importance in evaluating the geologic hazards associated with the project, the following complete reports should be included as technical appendices: **S005-51**

    a) June 2004 Fugro seismic hazard modeling study

    b) USGS Open-File Report 2004-1286, prepared at the behest of Congressperson Lois Capps and specifically addressing geologic and seismic hazards associated with this and similar projects.

Hazardous Materials

44. Drilling mud (bentonite slurry) is identified as a hazardous material, but principally with regard to water quality. In addition, reference is made to sections of Chapter 4.08 (Biological Resources—Terrestrial). However, the potential impact of release of bentonite slurry to the seafloor and smothering of benthic habitat is not but should be addressed in the EIS/EIR. **S005-52**

45. In Table 4.12-2 Major Laws … Hazardous Materials, please add the Coastal Zone Management Act as follows: Coastal Zone Management Act 307(c)(3)(A) and Coastal Act Chapter 3 Article 4, Section 30232. **S005-53**

46. We recommend that mitigation measure AMM HAZ-2a be broken into two separate mitigation measures (See also Comment #21 under Biological Resources – Marine): **S005-54**

    (1) Transport and storage of oil in accordance with USEPA and State requirements; and

    (2) Emergency response and containment of hazardous spills at the FSRU in compliance with Spill Control and Countermeasures Plan (USEPA 40 CCR Part 112), and in compliance with the USEPA National Oil and Hazardous Substances Pollution Plan Contingency Plan (NCP) requirements; and in compliance with the USCG's DWP operations plan (33 CFR 150.15) and USCF marine facility oil spill response plans.

Socioeconomics

47. Does JOFLO provide member companies and fishermen with specific guidelines for compensating fishermen for decreases in catch revenue (i.e.. preclusion)? If so, we **S005-55**

S005-50
Sections 4.11.1 and 4.11.4 have been updated with additional information on this topic.

S005-51
Appendices J1 and J2 are the cited reports.

S005-52
Impact BioMar-3 in Section 4.7.4 contains updated information on the impacts on benthic habitat from a release of bentonite drilling muds.

S005-53
Section 4.18.2 has been revised in response to this comment.

S005-54
AMM Haz-2a from the October 2004 Draft EIS/EIR has been deleted. Used oil management is addressed in Section 2.2.2.4. Section 4.12.2 describes the requirements for a Spill Prevention, Control and Countermeasure Plan.

S005-55
Section 4.16.4 discusses this topic.

recommend that MM Socio-7b acknowledge that those guidelines will be in place for this project (as is identified in MM Socio-7b for lost gear). We assume that arbitration (as discussed in MM Socio- 7b) is also specified in JOFLO guidelines and would be available for disputes involving lost or damaged gear and decreases in catch revenue. We therefore recommend that any JOFLO arbitration guidelines be discussed in Socio-7a as well.

Water Quality and Sediments

48. Under the **Federal** laws section of Table 4.18-5, please add Coastal Zone Management Act 307(c)(3)(A) – California Coastal Commission. Under the **State** laws discussion in the same table, delete reference to the "California Coastal Management Plan" and replace it with "California Coastal Act." Also, please add to this table the language of the Coastal Act's water quality policy, Section 30231. **S005-56** **S005-57**

49. Please see comments (2), (3), (4), (5), and (6), under Description of Proposed Action, above. **S005-58**

Again, thank you for the opportunity to comment. Please contact me at (415) 904-5205 or at adettmer@coastal.ca.gov if you have any questions or would like additional information.

Sincerely,

ALISON J. DETTMER
Manager
Energy and Ocean Resources Unit

2004/S005

S005-56
Section 4.18.2 has been revised in response to the comment.

S005-57
Section 4.18.2 has been revised in response to the comment.

S005-58
See the responses to Comments S005-4, 5, 6, and 7, respectively.

JACK O'CONNELL
State Superintendent of
Public Instruction
PHONE: (916) 319-0800

CALIFORNIA
DEPARTMENT OF
EDUCATION

1430 N STREET
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Source:
Letter to CSLC Commission
Date: 12/20/04

December 20, 2004

California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825
Attention: Cy Oggins

Ladies and Gentlemen:

At the November 30 public hearings in Oxnard, Congresswoman Lois Capps requested a 60-day extension of the public comment period on the EIS/EIR for the proposed BHP-Billiton LNG offshore terminal and onshore pipeline projects. Given the lack of notification to affected school districts, or to the Department, I supported the 60-day extension request as warranted and valuable to allow us to study the proposals. It is my understanding the request for the extension was not granted owing to federal rules or guidelines related to the offshore EIS, but that it would have been granted under California regulations governing EIR's. Inasmuch as it appears school districts with schools within 300 feet of one or more proposed pipelines were not noticed, I renew my support for the extension for proper study, and further request that it be granted owing to apparent irregularities in the noticing process. S007-1 S007-2

As I stated at the November hearing, news of such a large capacity natural gas pipeline system near existing and planned schoolsites is alarming to the school districts affected. Although, pipeline accidents are rare, they occur, as we can recall from recent experiences in this country. Recognizing that the incidence of pipeline ruptures and ignitions is low, we must also recognize that the consequences can be extremely high. The larger the pipeline and the greater the pressure, the higher the potential for catastrophic consequences. In the standards for school site selection, Section 14010 of Title 5 of the California Code of Regulations provides that: S007-3

> The site shall not be located near an above-ground water or fuel storage tank or within 1500 feet of the easement of an above ground or underground pipeline that can pose a safety hazard as determined by a risk analysis study, conducted by a competent professional, which may include certification from a local public utility commission.

In response to this regulation, the Department has developed a pipeline risk analysis protocol for school districts to use to evaluate the risk posed by pipelines above 80psi within 1500 feet of a schoolsite. We are advised by the industry that a 1500' study zone

S007-1
A Revised Draft EIR was recirculated under the CEQA for an additional public review period of 60 days. Sections 1.4 and 1.5.3.2 contain additional information on this topic. The distribution list for the document is provided in Appendix A.

S007-2
All deepwater port applications fall under the authority of the Deepwater Port Act, which requires that a decision on the application be made within 330 days of the publication of the Notice of Application in the Federal Register. The Notice of Application for the Cabrillo Port Project was published in the Federal Register on January 27, 2004. Although the comment period (53 days) could not be extended at that time, a Revised Draft EIR was recirculated in March 2006 under the CEQA for an additional public review period of 60 days. Section 1.4.1 contains additional information on this topic.

Section 1.5 contains information on opportunities for public comment. After the MARAD final license hearing, the public will have 45 days to comment on the Final EIS/EIR and the license application. The Federal and State agencies will have an additional 45 days to provide comments to the MARAD Administrator. The Administrator must issue the Record of Decision within 90 days after the final license hearing. The CSLC will hold a hearing to certify the EIR and make the decision whether to grant a lease. The California Coastal Commission will also hold a hearing. Comments received will be evaluated before any final decision is made regarding the proposed Project.

S007-3
Thank you for the information.

may not always be sufficient in the case of very large capacity, high pressure lines. I suspect that the pipelines proposed in this project fit into that category, making it prudent if not also necessary to evaluate a location within perhaps 2000' of a pipeline easement. We need to be able to study that before we can make a recommendation about extending the study zone for these pipelines. S007-3 cont'd

What is known today is that the proposed pipelines go past or near several schools and schoolsites in several Ventura County school districts. Where pipelines exist and would be expanded in flow capacity, nearby schools would be subject to increased peril. Where pipelines do not exist but would if these projects are approved, nearby schools would be subject to a new and significant hazard. To my knowledge the EIS and EIR do not take into consideration these realities faced by the school districts, nor do they propose any mitigation should a school or schoolsite need to be relocated. S007-4

Sincerely,

Signed

George M. Shaw, Field Representative
School Facilities Planning Division
ph.: 805-692-9913
GShaw@cde.ca.gov

cc: Charles Weis, Ventura County Superintendent of Schools

S007-4
Section 4.13.1 contains information on sensitive land uses in proximity to proposed and alternative pipeline routes, such as schools. There are no schools in the immediate vicinity of either of the proposed pipeline routes. Section 4.13.1.3 contains information on standards school districts must meet to qualify for State school bond funds for the acquisition of a new school site and construction of a new school facility. Section 4.13.1.3 contains revised text regarding possible school sites.

Section 4.2.8 describes regulations regarding pipelines, including the requirement to establish public education programs to prevent and respond to pipeline emergencies. Section 4.2.8.4 contains information on the estimated risk of Project pipeline incidents. Section 4.16.1.2 describes emergency planning and response capabilities in the Project area.

The proposed pipelines within Oxnard city limits would meet standards that are more stringent than those of existing pipelines because they would meet the minimum design criteria for a U.S. Department of Transportation (USDOT) Class 3 location. Also, MM PS-4c includes the installation of additional mainline valves equipped with either remote valve controls or automatic line break controls. SoCalGas operates high-pressure natural gas pipelines throughout Southern California.

State of California – The Resources Agency ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF FISH AND GAME
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Source:
USCG Docket

Date: 12/20/04

December 20, 2004

Mr. Cy Oggins
California State Lands Commission
100 Howe Avenue, Suite 100 South
Sacramento, CA 95825

Mr. Ken Kusano
U.S. Department of Homeland Security, U.S. Coast Guard
c/o Docket Management Facility
U.S. Department of Transportation
Room PL-401
400 Seventh Street SW
Washington D.C. 20590-0001

Comments on the Cabrillo Port Liquefied Natural Gas (LNG) Deepwater Port Project Draft Environmental Impact/Draft Environmental Report (DEIR/DEIS)

Dear Messrs. Oggins and Kusano:

The Department of Fish and Game (Department) has reviewed the Cabrillo Port Liquefied Natural Gas (LNG) Project DEIR/DEIS (applicant BHP Billiton LNG International, Inc.), prepared jointly by the California State Lands Commission (SLC) and the U.S. Coast Guard [USCG] (Department of Homeland Security) and the Maritime Administration (Department of Transportation), the Federal lead agencies (SCH 2004021107, docket number USCG-2004-16877). The proposed project is a LNG deepwater port located in 2,900 feet of water, approximately 13.9 miles offshore of Ventura County, California, in federal waters. The project would construct and operate an offshore floating storage and re-gasification unit (FSRU). LNG tankers would deliver and offload LNG to the FSRU which would store the LNG in three spherical tanks, each with a 91,000 cubic meter storage capacity. The LNG would be re-gasified and delivered to the mainland via two new 24-inch diameter natural gas pipelines. The twin pipelines would be approximately 21-miles long and would lie 100 feet apart on the ocean floor until the 13 meter water depth at which point they would be buried via horizontal directional drilling (HDD) to the landfall at Ormond Beach, near Oxnard, Ventura County. Two new on-shore pipeline loops (14.3-miles of 36-inch diameter pipeline, and 7.7-miles of 30-inch diameter pipeline) would be constructed to connect the offshore pipeline with the existing Southern California Gas Company intrastate pipeline system. The natural gas would be distributed

throughout the southern California region. The DEIR/DEIS also discusses a no-project alternative, an alternative deepwater port location in the Santa Barbara Channel, an alternative shore crossing at the Mandalay Generating Station, and two on-shore pipeline route alternatives.

The California agencies involved in permitting or approving a proposed LNG facility in California have formed the LNG Permitting Interagency Working Group. The Department is a member of that group. The Working Group has met over the last several months to develop and disseminate information on LNG issues, to identify key issues of concern to the state, and to understand each group member's respective role and concerns regarding the construction and operation of LNG facilities in California. While other members of the Working Group will be submitting individual comments reflecting their agency's particular role, all members of the Working Group wanted to underscore the importance of close communication and early and extensive cooperation among federal and state agencies, thereby assuring a thorough review of all proposed LNG facilities.

The Department is providing comments on the DEIR/DEIS as both a trustee and responsible agency. As trustee for the State's fish and wildlife resources, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. In this capacity, the Department administers the California Endangered Species Act (CESA), the Native Plant Protection Act, and other provisions of the California Fish and Game Code that afford protection to the State's fish and wildlife trust resources (CEQA Guidelines Section 15386). The Department may also be a responsible agency for a project affecting biological resources where the Department will exercise its discretion after the lead agency, to approve or carry out a proposed project or some facet thereof (CEQA Guidelines 15381).

In addition, under California Government Code section 8670, the Department's Office of Spill Prevention and Response enforces regulations requiring vessels to have Oil Spill Contingency Plans and Certificates of Financial Responsibility. They also require that vessels transferring or lightering oil or oil derivatives be subject to inspection or monitoring during the transfer. All vessels, over 300 gross tons, calling on California must comply with specific requirements to have oil spill response contractors, marine salvage, firefighting, emergency towing and lightering services under contract prior to entering state waters.

In these capacities, the Department provides the following comments on the Cabrillo Port LNG DEIR/DEIS.

Comments

Overall, the Department believes the DEIR/DEIS provides a comprehensive portrayal of impacts to fish and wildlife resources and habitats associated with the preferred project and alternatives.

Environmental Resources

- The Department stresses the importance of avoiding impacts to marine hard bottom habitat. The DEIR/DEIS states that hard bottom habitats do not occur within the Project area (page 4.7-3), however, if any unexpected hard bottom habitats are encountered during construction, they will be avoided (mitigation measure MM BioMar1-b). We assume the project area includes the substrate to be covered by the two 24-inch diameter, natural gas pipelines as well as the area necessary for the multitude of vessels and equipment associated with pipe laying activities. S006-1

- The Department is concerned with artificial lighting and its effects on certain seabird species such as the state-listed Xantus's murrelet (*Synthliboramphus hypoleucus*) as well as other alcids. Artificial lighting impacts to marine seabirds (and other marine species) are addressed by mitigation measure BioMar-13. The measure will develop a lighting plan which will shield lights and limit lighting to the minimum necessary to perform activities (see comment below). The Department recommends a seabird expert be consulted to aid in development of the lighting plan. S006-2

- The DEIR/DEIS states that lighting from the FSRU is a Class II impact (significant adverse impacts that can be eliminated or reduced below an issue's significance criteria) that can be reduced to a Class III impact with mitigation (minor, short-term, or temporary). The mitigation measure, a plan to minimize lighting as much as possible, may reduce lighting, but the FSRU will still illuminate the nighttime sky at levels above ambient light (according to the document, searchlights may even be used when essential). Furthermore, in the Aesthetics section the document states that night lighting on the FSRU will be visible to coastal residents 13.8 miles away. This is deemed a Class I unavoidable adverse impact and no mitigation measure is suggested. Accordingly, we disagree that mitigation measure BioMar-13 can reduce impacts to Xantus's murrelets, and other alcids which are nocturnal in colony or foraging habits, to a Class II impact. We believe that although the lighting may be minimized, there is still the potential for these species to be impacted. Given that Xantus's murrelets are listed and other probable species to encounter the FSRU are species of special concern, we believe nighttime lighting of the FSRU is an unavoidable adverse impact to these nocturnally active seabirds. S006-3

S006-1
Section 2.3.1 discusses this topic.

S006-2
AM BioMar-3a and Impact BioMar-3 in Section 4.7.4 contain information on this topic.

S006-3
Impact BioMar-3 in Section 4.7.4 contains information on this topic.

- HDD under Ormond Beach into the Reliant Energy Ormond Beach Generating Station Reliant plant should be conducted outside of the Western snowy plover (*Charadrius alexandrinus nivosus*) and California least tern (*Sterna antillarum brownii*) breeding seasons of March through September. Western snowy plovers and California least terns are listed species while the least tern is also designated as a Fully Protected Species (under Fish and Game Code §3511). This designation prohibits take or possession of this species at any time (i.e., no take authorizations from the State are available), thus, it is imperative that impacts to this species be avoided. S006-4

- It should be noted that Ventura marsh milk-vetch (*Astragalus pycnostachyus* var. *lanosissimus*), a state-listed endangered plant, occurs at Ormond Beach (transplant mitigation population on Coastal Conservancy property). Impacts to this location should be avoided. S006-5

- The project applicant may need to obtain CESA permits or other State approvals for the Line 225 crossing over the Santa Clara River if work activities extend into the nesting seasons of the Least Bell's vireo (*Vireo bellii pusillus*) and Willow flycatcher (*Empidonax traillii*) (March through August). S006-6

- The final EIR/EIS should include a discussion or impact discussion for long term maintenance by Sempra/Socal Gas regarding who will take over the pipelines. There needs to be some stipulation that the receiving entity will abide by all the mitigation measures in the future. S006-7

With regard to environmental resources, the Department concurs that the Proposed Project is the environmentally preferable project and we do not object to the adoption of the Proposed Project, provided the described mitigation measures are fully implemented and the forgoing comments are adequately addressed.

Navigation and Vessel Safety Issues

The Department's Office of Spill Prevention and Response would also like to provide the following recommendations for navigational and vessel safety. We request that the CA State Lands Commission and the US Coast Guard in their project approvals require implementation of the following measures as part of the project.

GENERAL

- Recommend installation and maintenance of a PORTS system (physical oceanographic real time system) to monitor currents (surface, mid depth, and bottom) salinity, water temp, wave conditions, tides, winds. This S006-8

S006-4
Section 4.8.3 discusses this topic.

S006-5
Section 4.8.5 discusses potential impacts on Ventura marsh milkvetch.

S006-6
Thank you for the information.

S006-7
SoCalGas, as the Applicant's designated representative, would be required to implement the mitigation applicable to the onshore pipelines.

The lead Federal and State agencies share the responsibility to ensure that mitigation measures are implemented. Table 6.1-1 in Chapter 6 is the basis for the Mitigation Monitoring Program, which would be implemented, consistent with section 15097(a) of the State CEQA Guidelines, to ensure that each mitigation measure is incorporated into Project design, construction, operation, and maintenance activities.

S006-8
Section 2.2.3 describes monitoring to be conducted by the Applicant.

information would be available to the Mooring Master to aid mooring operations. It would also be available to NOAA and other marine scientific organizations.

- Require zero discharges to marine waters of all pollutants for any offshore operations. S006-9
- Require all wastes to be hauled ashore or plasma incinerated aboard vessels. S006-10
- Require all solid waste or sewage sludge to be properly disposed of on shore. S006-11
- Require that both the LNG ships and the Floating Storage and Re-gasification vessels be subject to the California State regulations for Contingency Plans and Certificates of Financial Responsibility. S006-12

CONSTRUCTION

- Require all vessels used for the construction phase, which are over 300 tons, be subject to compliance with California State regulations requiring Oil Spill Contingency Plans and Certificates of Financial responsibility. S006-13

VESSEL TRAFFIC

- Require expansion of the LA/LB Vessel Traffic Services (VTS) area of operational control to include the Santa Barbara Channel, the use remote radars and communications relays would enhance navigation safety and aid in enforcing the safety zones. S006-14
- Require one way traffic in the vicinity the LNG carrier during transit in and out of the channel. S006-15
- Require vessel escort for arrival and departures of LNG carriers S006-16

FSRU

- Require the Deep Water Port and the FRSU to be considered a marine facility under Federal, State and local jurisdiction. All state and local regulations for marine facilities would be enforced by the appropriate jurisdictions. S006-17
- Require emergency breakaway tests and drills, leak drills, fire drills, collision drills, damage control drills on a scheduled basis. S006-18
- Require local firefighting, tug operators, emergency responders be trained on LNG and emergency response activities involving vessels used in the deep water port and LNG transfer operations. S006-19
- Require the FSRU to retain as much fresh water generated during the re-gasification process for use as ballast water or to transfer the fresh water to the LNG ship for use as ballast water if feasible. S006-20
- Require a regulatory agency to inspect vessels and waste streams for the FSRU and monitor environmental impacts caused by the deep water port. S006-21

S006-9
"Wastewater Treatment and Discharge" in Section 2.2.2.6 and Impact WAT-5a in Section 4.18.4 contain information on the amount of gray water that would be discharged from the FSRU in accordance with a facility-specific NPDES permit issued by the USEPA. Section 4.18.2 contains information on the regulations with which the Applicant would comply to treat, discharge, and/or dispose of wastes and wastewaters.

S006-10
Section 2.2.2 describes waste management procedures.

S006-11
See the response to Comment S006-10.

S006-12
Operations on the FSRU are subject to Federal regulations. Operations aboard the LNG carriers are subject to Federal and international maritime law, as discussed in Section 1.3. Section 4.2.5 contains information on liability in case of an accident and reimbursement for local agencies.

S006-13
All aspects of the Project would have to adhere to the applicable Federal, State, and local regulations. Section 4.12.2 discusses the State Lempert-Keene-Seastrand Oil Spill Prevention and Response Act of 1990, which requires vessel and marine facilities to have marine oil spill contingency plans and to demonstrate financial responsibility.

S006-14
Section 4.3.1.2 contains information on the expansion of the Vessel Traffic Service at the Port of Los Angeles/Long Beach.

S006-15
LNG carriers approaching and departing the Cabrillo Port FSRU would travel on the routes depicted in Figure 4.3-2 (also see Section 4.3.1.3). LNG carriers would neither cross nor enter the Santa Barbara Channel coastwise traffic lanes under normal operating conditions. The FSRU would be located about 2 nautical miles from the southbound coastwise traffic lane. Given this distance, its presence, under normal operating conditions, would not interfere with operations in the coastwise traffic lanes.

LNG carriers and commercial vessels longer than 65 feet (20 m) would be equipped with an automatic identification system (AIS) so that they would be able to detect other LNG carriers and other

vessels. Also, LNG carriers would be responsible for adhering to the "rules of the road" for ship traffic. Section 4.3.1.4 describes safety measures to be used.

S006-16
Section 4.2.7.3 and Appendix C3-2 contain information on LNG carrier security. The USCG does not anticipate routinely providing vessel escort to the LNG carriers.

S006-17
Section 1.1 discusses Federal and State jurisdiction for the deepwater port and associated infrastructure.

S006-18
As discussed in Appendix C3-2, under the USCG maritime security regulations (33 CFR 105 Subpart D), LNG facilities must develop a facility security plan, which includes requirements for safety drills and exercises.

S006-19
Section 4.2.4.2 addresses this topic. The USCG responds to emergencies offshore.

S006-20
The Project has been modified since issuance of the October 2004 Draft EIS/EIR. See Section 1.4.2 for a summary of Project changes. A closed loop tempered water cooling system, which recirculates water, would be used instead of a seawater cooling system, except during annual maintenance (four days for the closed loop tempered water cooling system, and four days for the Moss tanks when the inert gas generator [IGG] would be operating).

Because seawater would only be used as non-contact cooling water during these maintenance activities, the volume of seawater used would be greatly reduced. Section 2.2.2.4 describes the proposed seawater uptakes and uses for the FSRU. Appendix D5 describes seawater intakes and discharges during Project operations, and Appendix D6 describes the closed loop water system and provides thermal plume modeling analysis of discharges from the backup seawater cooling system.

When either the backup seawater cooling system or the IGG are operating, the temperature of the discharged seawater would be elevated above ambient temperatures no more than 20°F at the point of discharge and would be 1.39°F at 300 m from the point of discharge during the worst case scenario. These thermal discharges would comply with the California Thermal Plan (see

Sections 4.7.4 and 4.18.4 and Appendix D6).

Ballast water would only be made up of ocean water. Freshwater would be discharged. The discharge of the volume of freshwater generated on the FSRU is not likely to affect salinity.

S006-21
The USCG would have the authority to inspect vessels, and the USEPA would issue permits for discharges from the FSRU. Table 6.1-1 identifies the regulatory agency responsible for enforcement of each mitigation measure cited in the EIS/EIR.

Impacts monitored would include noise, light, air, water and temperature impacts on wildlife and the environment.

- Require FSRU to comply with State and local regulations for the shipment storage, disposal and spill reporting requirements for all hazardous materials used or stored aboard the FSRU. Some of the known chemicals are used to neutralize the pH of distilled water aboard the FSRU and urea used in the air emissions cleansing system. S006-22
- Require an emergency notification for earth quakes sub-sea and onshore be sent to the FSRU, emergency shut down of the vessels re-gasification units may be required if the pipeline either ashore or sub-sea are impacted. A restart of the re-gasification units would be dependant upon systems integrity verification. S006-23
- Require funding source to pay for all State and local agency activities associated with this project. S006-24
- Require insurance to cover any types of potential impacts from the operation of the Deep Water Port.
- Set aside funds for removal and abandonment of the FRSU and associated systems. S006-25

We thank you for the opportunity to provide these comments. If you have any questions or need additional information, please contact the following personnel. For questions on marine environmental concerns please contact Ms. Marilyn Fluharty, Environmental Scientist, Marine Region, at telephone (858) 467-4231. For questions on terrestrial environmental concerns please contact Ms. Morgan Wehtje, Senior Environmental Scientist, Region 5, at telephone (805) 491-3571. To discuss project construction, vessel navigation and pollution prevention issues please contact Mr. Jack Geck, Supervisor, Marine Safety Unit, Office of Spill Prevention and Response, at (916) 323-4664.

Sincerely,

for Sandra C. Morey, Chief
Habitat Conservation Planning Branch

cc: State Clearinghouse, Sacramento (original sent to lead agency)
Morgan Wehtje, R5, Santa Barbara
Marilyn Fluharty, MR, San Diego
Jack Geck, OSPR, Sacramento

S006-22
Section 4.12.2 discusses regulatory requirements concerning hazardous materials.

S006-23
Impact PS-1 and PS-3 in Section 4.2.7.6 presents emergency procedures, as well as measures to minimize public safety impacts, in case of an incident or damage at the deepwater port or offshore pipelines. Impacts PS-3 and PS-4 in Section 4.2.7.6 present emergency procedures, as well as measures to minimize public safety impacts, in case of an incident or damage to offshore and onshore pipelines.

S006-24
Section 4.2.5 contains information on liability in case of an accident and reimbursement for local agencies.

S006-25
The projected FSRU in-service life is a maximum of 40 years. Environmental conditions and specific impacts 40 years from now are not reasonably foreseeable. As noted in Section 2.8, supplemental NEPA/CEQA documentation, which would take into consideration the environmental conditions at the time, would be required prior to the decommissioning of the FSRU. Also as noted in Section 2.8, as part of the license approval, the DWPA requires each applicant to furnish a bond or demonstrate other proof that if the project is abandoned then sufficient monies would be available for either completion or demolition of the project.

308479

USCG-2004-16877-618

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
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IGR/CEQA No. 041102AL
Cabrillo Port Liquefied Natural Gas
Deepwater Port
Vic. Ven-County Wide
SCH # 2004021107

November 4, 2004

Mr. Cy R. Oggins
California State Lands Commission
100 Howe Avenue, Suite 100-South
Sacramento, CA 95825

Dear Mr. Oggins:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced project. The proposed project is to construct and operate a new offshore LNG floating storage and regasification unit, offshore and onshore pipelines, and related onshore facilities.

We would like to remind you that any work to be performed within the State Right-of-way will need an Encroachment Permit from the California Department of Transportation. S001-1

Storm water run-off is a sensitive issue for Los Angeles and Ventura counties. Please be mindful that projects need to be designed to discharge clean run-off water. S001-2

Any transportation of heavy construction equipment and/or materials which requires the use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. We recommend that large size truck trips be limited to off-peak commute periods. In addition, a truck/traffic construction management plan is needed for this project. Thank you for the opportunity to have reviewed this project. S001-3 S001-4 S001-5

If you have any questions, please feel free to contact me at (213) 897-3747 or Alan Lin the project coordinator at (213) 897-8391 and refer to IGR/CEQA No. 041102AL

Sincerely,

Cheryl J. Powell

CHERYL J. POWELL
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

"Caltrans improves mobility across California"

2004/S001

S001-1
Thank you for the information. Section 4.17.2 discusses this topic.

If the Applicant receives a license for the deepwater port from MARAD and a lease from CSLC, the Applicant and its designated representatives would be required to adhere to all applicable local, State, and Federal laws, regulations, and permit requirements in the execution of all phases of the Project.

S001-2
The Project would have to meet all the applicable Federal and State regulations. As part of the NPDES permit, a stormwater pollution prevention plan would be required. The Applicant or its designated representative have also committed to use SoCalGas Stormwater Best Management Plans. Sections 4.18.2, 4.18.4, 2.7.2, and 4.8.4 contain more information on this topic.

S001-3
See the response to Comment S001-1.

S001-4
See the response to Comment S001-1.

S001-5
Thank you for the information. Section 4.17.4 under Impact-2 discusses this topic.